

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A heat-resistive catalyst comprising:
a composite particle comprising a noble metal particle, and a co-catalytic metal compound particle contacting as a metal with the noble metal particle; and
a substrate carrying the noble metal particle and the co-catalytic metal compound particle.
2. (Original) A heat-resistive catalyst comprising:
a composite particle comprising a noble metal particle, and a co-catalytic metal compound particle contacting as an oxide with the noble metal particle; and
a substrate carrying the noble metal particle and the co-catalytic metal compound particle.
3. (Original) The heat-resistive catalyst as claimed in claim 1, wherein the co-catalytic metal compound particle comprises a transition metal compound.
4. (Original) The heat-resistive catalyst as claimed in claim 2, wherein the co-catalytic metal compound particle comprises one of a rare earth element compound and a compound containing Zr.
5. (Currently amended) The heat-resistive catalyst as claimed in claim 1 ~~or~~ 2, wherein the substrate comprises a porous oxide having a surface carrying the composite particle.
6. (Currently amended) The heat-resistive catalyst as claimed in claim 1 ~~or~~ 2, wherein the substrate comprises at least one porous oxide selected from among an alumina, a cerium oxide, a titanium oxide, a zirconia, and a silica.

7. (Currently amended) The heat-resistive catalyst as claimed in claim 1 ~~or~~ 2, wherein the noble metal particle comprises at least one metal selected from among Ru, Rh, Pd, Ag, Ir, Pt, and Au.
8. (Currently amended) The heat-resistive catalyst as claimed in claim 1 ~~or~~ 2, wherein the co-catalytic metal compound particle comprises a transition metal compound containing at least one transition metal selected from among Fe, Co, Ni, Cu, Ti, and W.
9. (Original) A production method of heat-resistive catalyst, comprising:
having a noble metal salt aqueous solution and a co-catalytic metal salt aqueous solution concurrently provided in a reverse micelle,
preparing reverse micellar solution containing a noble metal precursor and a co-catalytic metal precursor; and having a substrate carrying a composite particle comprising the noble metal precursor and the co-catalytic metal precursor concurrently reduced as a noble metal particle and a co-catalytic metal particle, respectively.
10. (Original) The production method of heat-resistive catalyst as claimed in claim 9, comprising providing a reductant to the emulsion, concurrently reducing the noble metal precursor and the co-catalytic metal precursor in the reverse micelle, forming the composite particle.
11. (Original) The production method of heat-resistive catalyst as claimed in claim 9, comprising:
mixing, in the reverse micelle, a hydrolyzate of alkoxide as a precursor of a porous oxide forming the substrate, having a mixture; and
firing the mixture, before carrying the composite particle by a surface of the porous oxide.
12. (Original) The production method of heat-resistive catalyst as claimed in claim 9, comprising mixing, in the reverse micelle, an aqueous solution of a precursor salt of a

porous oxide forming the substrate and a precipitating agent or an insolubilizing agent for precipitating or insolubilizing the precursor salt of the porous oxide as a hydroxide, before a firing to carry the composite particle by a surface of the porous oxide.

13. (Original) The production method of heat-resistive catalyst as claimed in claim 9, comprising dispersing, in the emulsion, powder of a porous oxide forming the substrate, before a firing to carry the composite particle by a surface of the porous oxide.

14. (Original) The production method of heat-resistive catalyst as claimed in claim 9, wherein the noble metal salt aqueous solution comprises a metal salt aqueous solution of at least one metal selected from among Ru, Rh, Pd, Ag, Ir, Pt, and Au.

15. (Original) The production method of heat-resistive catalyst as claimed in claim 9, wherein the co-catalytic metal salt aqueous solution comprises a metal salt aqueous solution of at least one metal selected from among Fe, Co, Ni, Cu, Ce, Zr, La, Ti and W.

16. (Original) The production method of heat-resistive catalyst as claimed in claim 9, wherein the substrate comprises a porous oxide containing at least one oxide selected from among an alumina, a cerium oxide, a titanium oxide, a zirconia, and a silica.

17. (New) The heat-resistive catalyst as claimed in claim 2, wherein the substrate comprises a porous oxide having a surface carrying the composite particle.

18. (New) The heat-resistive catalyst as claimed in claim 2, wherein the substrate comprises at least one porous oxide selected from among an alumina, a cerium oxide, a titanium oxide, a zirconia, and a silica.

19. (New) The heat-resistive catalyst as claimed in claim 2, wherein the noble metal particle comprises at least one metal selected from among Ru, Rh, Pd, Ag, Ir, Pt, and Au.

20. (New) The heat-resistive catalyst as claimed in claim 2, wherein the co-catalytic metal compound particle comprises a transition metal compound containing at least one transition metal selected from among Fe, Co, Ni, Cu, Ti, and W.